

CLAIMS

1. A transparent pane having generally-opposed first and second major surfaces, each major surface bearing a functional coating and having a peripheral region that is substantially free of the functional coating.

2. The transparent pane of claim 1 wherein the functional coating on one of said major surfaces is an active coating.

3. The transparent pane of claim 2 wherein the active coating is a photocatalytic coating.

4. The transparent pane of claim 3 wherein the photocatalytic coating comprises titanium oxide.

5. The transparent pane of claim 2 wherein the functional coating on the other major surface is a low-emissivity coating.

6. The transparent pane of claim 1 wherein the functional coating on each major surface is an active coating.

7. The transparent pane of claim 1 wherein said coating-free peripheral region on each major surface extends a predetermined distance inwardly from an edge of the substrate.

8. The transparent pane of claim 7 wherein said predetermined distance is less than about one inch.

9. The transparent pane of claim 8 wherein said predetermined distance is about 1/2 inch.

10. A transparent pane having generally-opposed first and second major surfaces, at least one of said major surfaces bearing an active coating and having a peripheral region that is substantially free of the active coating.

11. The transparent pane of claim 10 wherein the active coating is a photocatalytic coating.

12. A multiple-pane insulating glass unit comprising two spaced-apart panes and a spacer joining confronting, inner peripheral surfaces of the panes, the spacer and the confronting surfaces of the panes together defining a between-pane space, at least one of the panes having an outer surface bearing a functional coating, said outer surface having a peripheral region that is substantially free of the functional coating.

13. The insulating glass unit of claim 12 wherein the functional coating is an active coating.

14. The insulating glass unit of claim 13 wherein the active coating is a photocatalytic coating.

15. The insulating glass unit of claim 14 wherein the photocatalytic coating comprises titanium oxide.

16. The insulating glass unit of claim 12 wherein at least one of the panes has a coated inner surface bearing a low-emissivity coating.

17. The insulating glass unit of claim 16 wherein said coated inner surface has a peripheral region that is substantially free of said low-emissivity coating.

18. The insulating glass unit of claim 12 further comprising a frame in which at least one edge region of the insulating glass unit is received, wherein a bead of glazing compound is disposed between a mounting surface of the frame and said coating-free peripheral region of the insulating glass unit.

19. The insulating glass unit of claim 18 wherein the functional coating is photocatalytic and the glazing compound comprises an organic material.

20. The insulating glass unit of claim 19 wherein the glazing compound provides a substantially water-proof seal between the mounting surface of the frame and said coating-free peripheral region of the insulating glass unit.

21. A method of treating a coated substrate, the method comprising:

- a) providing a transparent pane having generally-opposed first and second major surfaces, each major surface bearing a functional coating;
- b) removing substantially all of the functional coating from a peripheral region of the first major surface; and
- c) removing substantially all of the functional coating from a peripheral region of the second major surface.

22. The method of claim 21 wherein the functional coating is removed from both major surfaces of the pane substantially simultaneously.

23. The method of claim 21 wherein the functional coating is removed from both major surfaces of the pane by grinding.

24. The method of claim 23 wherein the functional coating is removed from said first major surface using a first grinder, and the functional coating is removed from said second major surface using a second grinder.

25. The method of claim 24 wherein the pane is positioned between the first and second grinders while simultaneously operating said grinders.

26. A glazing assembly comprising:

- a) a transparent pane having generally-opposed first and second major surfaces, at least one of said major surfaces bearing an active coating;
- b) a frame in which at least one edge of the pane is received, the frame having a mounting surface against which said coated pane surface is retained; and
- c) a bead of glazing compound disposed between the mounting surface of the frame and a peripheral region of said coated pane surface, the glazing compound being shielded from direct contact with the active coating by a barrier layer provided between said coated pane surface and the glazing compound.

27. The glazing assembly of claim 26 wherein the glazing compound comprises a material to which the active coating is degenerative.

28. The glazing assembly of claim 27 wherein the active coating is photocatalytic and the glazing compound comprises an organic material.

29. The glazing assembly of claim 26 wherein the barrier layer comprises a material that is durable to the active coating.

30. The glazing assembly of claim 29 wherein the active coating is photocatalytic and the barrier layer comprises an inorganic material.

31. The glazing assembly of claim 26 wherein the glazing compound provides a substantially water-proof seal between the mounting surface of the frame and the coated pane surface.

32. The glazing assembly of claim 26 wherein ^{P.A.}the substrate is part of a multiple-pane insulating glass unit mounted in the frame.

33. A glazing assembly comprising:

a) a transparent pane having generally-opposed first and second major surfaces, at least one of said major surfaces bearing an active coating;

b) a frame in which at least one edge of the pane is received, the frame having a mounting surface against which said coated pane surface is retained; and

c) a bead of glazing compound disposed between the mounting surface of the frame and a peripheral region of said coated pane surface, the glazing compound being in direct contact with the active coating and comprising a material that is durable to the active coating.

34. The glazing assembly of claim 33 wherein the active coating is photocatalytic and the glazing compound comprises an inorganic material.

35. The glazing assembly of claim 33 wherein the glazing compound provides a substantially water-proof seal between the mounting surface of the frame and the coated pane surface.

36. The glazing assembly of claim 33 wherein the transparent pane is part of a multiple-pane insulating glass unit mounted in the frame.

37. A frameless glazing assembly comprising:

a) a transparent pane having generally-opposed first and second major surfaces, at least one of said major surfaces bearing an active coating and having one or more surface regions that are each substantially free of the active coating;

b) one or more mounts bounding a glazing opening in which the transparent pane is mounted, each mount defining a mounting surface against which said coated pane surface is retained; and

c) a bead of glazing compound disposed between each mount surface and a respective one of said coating-free surface regions.

38. The frameless glazing assembly of claim 37 wherein the active coating on the transparent pane is a photocatalytic coating.

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